

THE A. L. A. M. STANDARD SCREWS AND NUTS.—III.

DIMENSIONS OF SCREWS Form of Thread, U. S. Standard.		Diameter	Pitch	Length of Threaded portion		Thickness of Head	Diameter of Facing under Head	Depth of Facing under Head	Width of Slot in Head	Depth of Slot in Head	Diameter of Cotter Pin Hole
A	B			C	D						
$\frac{1}{4}$	28	$\frac{3}{8}$	$\frac{3}{16}$	$\frac{3}{16}$	$\frac{3}{16}$	$\frac{3}{8}$	$\frac{1}{64}$	$\frac{1}{16}$	$\frac{3}{32}$	$\frac{5}{64}$	
$\frac{5}{16}$	24	$\frac{15}{32}$	$\frac{1}{2}$	$\frac{15}{64}$	$\frac{1}{2}$	$\frac{1}{64}$	$\frac{1}{16}$	$\frac{7}{64}$	$\frac{5}{64}$		
$\frac{3}{8}$	24	$\frac{9}{16}$	$\frac{9}{16}$	$\frac{9}{32}$	$\frac{9}{16}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{1}{8}$	
$\frac{7}{16}$	20	$\frac{21}{32}$	$\frac{11}{16}$	$\frac{21}{64}$	$\frac{11}{16}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{1}{8}$	
$\frac{1}{2}$	20	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{1}{8}$	
$\frac{9}{16}$	18	$\frac{27}{32}$	$\frac{7}{8}$	$\frac{27}{64}$	$\frac{7}{8}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	
$\frac{5}{8}$	18	$\frac{15}{16}$	$\frac{15}{16}$	$\frac{15}{32}$	$\frac{15}{16}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	
$\frac{11}{16}$	16	$1\frac{1}{32}$	1	$\frac{33}{64}$	1	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	
$\frac{3}{4}$	16	$1\frac{1}{8}$	$1\frac{1}{8}$	$\frac{9}{16}$	$1\frac{1}{8}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	
$\frac{7}{8}$	14	$1\frac{5}{16}$	$1\frac{1}{4}$	$\frac{21}{32}$	$1\frac{1}{4}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{3}{32}$	
1	14	$1\frac{1}{2}$	$1\frac{7}{16}$	$\frac{3}{4}$	$1\frac{7}{16}$	$\frac{1}{64}$	$\frac{1}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	

MACHINERY, N.Y.

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NOTES ON MATERIAL, FINISH, AND DIMENSIONS

1- Material

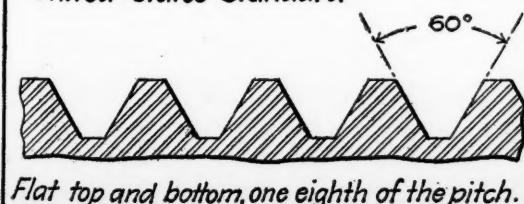
For all screws and nuts—steel, Tensile strength, not less than 100,000 lbs. per square inch; Elastic limit, not less than 60,000 lbs. per square inch.

2- Dimensions

All dimensions in inches. Length of threaded portion:  $1\frac{1}{2}$  times body diameter.

3- Form of Thread

United States Standard



Flat top and bottom, one eighth of the pitch.

4- Finish

Screw heads shall be flat chamfered.

Plain nuts shall be flat chamfered.

Castle nuts shall be chamfered.

What is understood by screw makers as "semi-finish" shall be the finish for all heads and nuts.

Screws are to be left soft. Screw heads are to be left soft. The plain nuts are to be left soft. The castle nuts are to be case-hardened

5- Tolerance

The body diameter of the screw shall be one-thousandth (.001") inch less than the nominal diameter, with a plus tolerance of zero and a minus tolerance of two-thousandths (.002") inch.

The nuts shall be a good fit, without perceptible shake

The clearance between tops of threads and bottom of threads in nuts shall be that existing in the present practice of machine screw makers; that is, the tap shall be between two-thousandths (.002") inch and three-thousandths (.003") inch large.

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